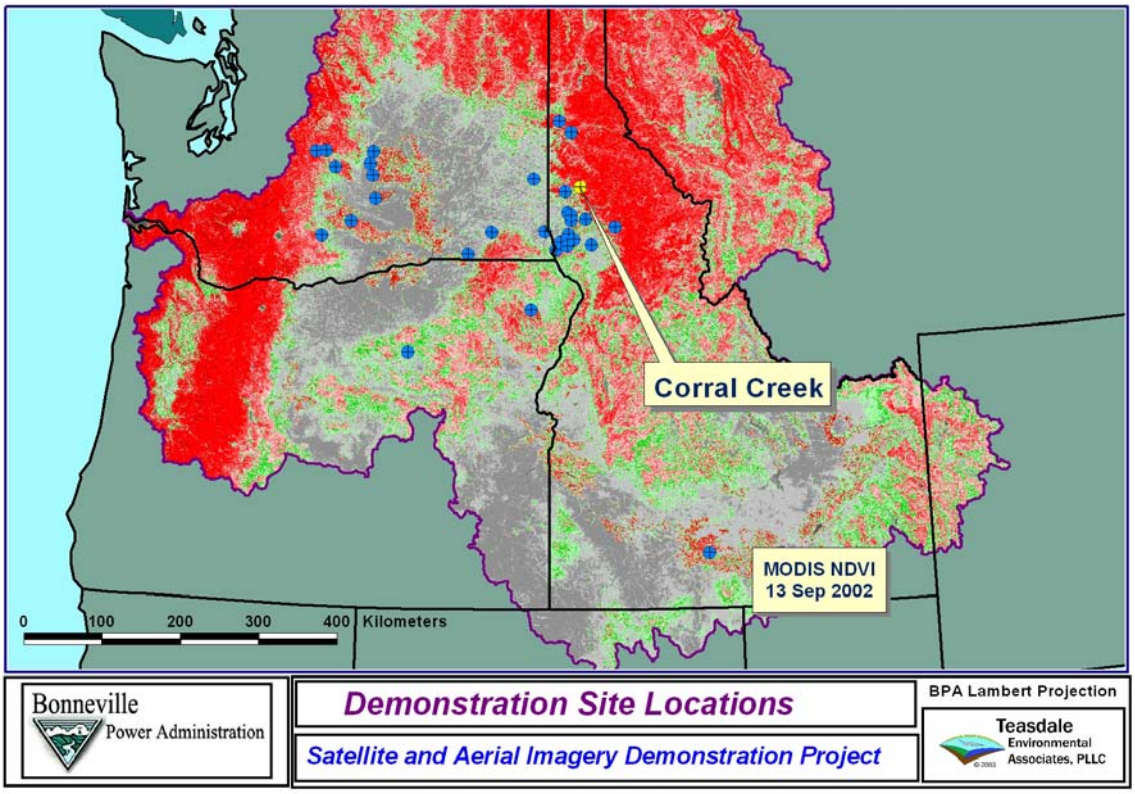
Corral Creek Demonstration Site	
Location	**Latah County, ID**
Water body	**Corral Creek**
Ecological Provenance	**Mountain Snake**
Subbasin Name	**Clearwater**
BPA Hydrologic Unit Code ID	**3113**
Hydrologic Unit Code, 6th Level	**170603060702**
Watershed Name	**Clearwater, ID**



Unique Characteristics

Corral Creek is a 58 km^2 (22 mi^2) forested and agricultural watershed in the Potlatch River Basin of north central Idaho. Flows in Corral Creek vary seasonally from high snowmelt discharge to very low, sometimes dry, flows in late summer and early fall. The watershed includes forested headwaters, open middle elevation agricultural lands, and steep canyon land near the confluence with the Potlatch River.

Satellite imagery for this site includes Landsat 5, Landsat 7 and ASTER. Digital color aerial imagery was acquired on September 4, 2001 and January 4, 2002. Ancillary data includes topographic DRG's, DOQ's,

watershed boundaries, climate data, and national land cover data. The imagery and supporting data reveal the characteristics of riparian vegetation, stream channel and land use.

Objective

The primary objective was to acquire very high-resolution digital aerial imagery of Corral Creek from its junction with the Potlatch River to the town of Helmer, ID. The imagery is intended to support on going conservation planning activities in the watershed. Secondary objectives were to evaluate watershed recent changes in land cover characteristics of the watershed with satellite imagery and NAPP aerial photography.

Results

Stream morphology and riparian vegetation could be classified in the digital aerial imagery. The imagery flight happened to coincide with a dye tracer test of the Helmer municipal wastewater ponds. The imagery showed traces of dye in the seasonally dry stream bed downstream of the ponds.

Forest land cover changes were observed in a sequence of Landsat images from 1990 through 2002. Very high resolution digital aerial imagery was acquired to provide ground truth data for interpretation of the satellite imagery. Smoke haze was observed in several of the summer Landsat images placing limits on the ability to transform original images into at surface reflectance. This is a common problem with Landsat imagery acquired in late summer and early fall in the central Idaho and eastern Washington watersheds. The smoke haze generally does not inhibit direct interpretation of land cover features.